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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/698,177	10/31/2003	Rex Wesley Shores	31849.42	9899	
J. Andrew Low	7590 10/30/200° res	7	EXAMINER		
HAYNES AND BOONE, LLP			CUMBERLEDGE, JERRY L		
Suite 3100			ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

X.		$\mathcal{N}$			
,	Application No.	Applicant(s)			
Office Assistant Communication	10/698,177	SHORES ET AL.			
Office Action Summary	Examiner	Art Unit			
	Jerry Cumberledge	3733			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence addre	ss		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this commi D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>06 A</u>	uaust 2007.				
	action is non-final.				
3) Since this application is in condition for alloward closed in accordance with the practice under E	•		erits is		
Disposition of Claims					
4)⊠ Claim(s) <u>1-14 and 16-21</u> is/are pending in the	application.				
4a) Of the above claim(s) <u>22-38</u> is/are withdraw					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-14 and 16-21</u> is/are rejected.		•			
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
9) ☐ The specification is objected to by the Examine	er.				
10)☑ The drawing(s) filed on <u>03 December 2003</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct	• • • • • • • • • • • • • • • • • • • •	•			
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-	152.		
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).			
1. ☐ Certified copies of the priority document	s have been received.				
2. Certified copies of the priority document		ion No			
3. Copies of the certified copies of the prior			ge		
application from the International Bureau					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)			•		
1) Notice of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal R				
Paper No(s)/Mail Date <u>09/13/2007</u> <u>04/30/2007</u> .	6) Other:	• •			

### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Shapira (US Pat. 5,913,859).

Shapira discloses a surgical instrument for the dissection of bone or other tissue having a motor with a power output (column 6, lines 50-55), the surgical instrument comprising: a dissection tool (Fig. 2, ref. 30) having an elongated shaft (Fig. 2, ref. 30) with a dissection area (Fig. 3, near ref. 59) disposed adjacent a distal end and a coupling area (Fig. 2, ref. 41) disposed adjacent a proximal end; a coupling assembly (Fig. 3, assembly of ref. 44) configured for coupling the power output to said coupling area of said tool; and an angled attachment tube (Fig. 2, ref. 17) having a proximal portion (Fig. 2, portion towards ref. 50) for coupling to said coupling assembly and an internal passage (Fig. 2, passage extending from ref. 62 to right end of ref. 47) extending from said proximal portion to an opposite distal portion (Fig. 2), the attachment tube positioned along at least a portion of said elongated shaft (Fig. 2) and substantially supporting a portion of said elongated shaft disposed adjacent said dissection area (Fig. 2), said internal passage including a longitudinal curved portion (Fig. 2, curved portion near ref. 17) disposed between said proximal portion and said

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distal portion (Fig. 2), said angled attachment tube supporting said elongated shaft in a longitudinally curved configuration corresponding to said curved portion (Fig. 2), wherein said attachment tube is movably coupled to said coupling assembly (Fig. 2). The coupling assembly has a longitudinal axis (Fig. 1) and said angled attachment tube is configured for coupling with the coupling assembly at a plurality of locations. The attachment tube is configured such that movement along said longitudinal axis is accomplished without substantial rotary motion, since a surgeon could linearly move the attachment tube by hand. The attachment tube is axially movably coupled to said coupling assembly, since the attachment tube and the coupling assembly can both be moved axially. The coupling assembly and said attachment tube include a projection and detent retention system (Fig. 4, near ref. 35) therebetween to retain said attachment tube in said guiding position. The at least one projection may be slidably disposed in said elongated detents to permit axial movement of said attachment tube with respect to said coupling assembly. The movable projection provides a tactile sensation to the user to indicate movement between the open position and the guiding position. The motor includes a motor housing and said coupling assembly is removably coupled to the motor housing (column 6, lines 50-53). The elongated shaft includes a reduced diameter portion (Fig. 2, near ref. 35). The elongated shaft includes a curved portion (Fig. 2, near ref. 35). The attachment tube further comprises at least one bearing proximal to the curved portion and at least one bearing distal to the curved portion to support at least a portion of the elongated shaft (Fig. 2), since the surface of the tip of the instrument and the surfaces towards ref. 10 can be considered to be bearing

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surfaces that support the elongated shaft, which is disposed within the angled attachment tube.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 6 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shapira (US Pat. 5,913,859).

Shapira discloses the claimed invention except for the instrument further includes a second coupling assembly linked to said coupling assembly, said second coupling assembly adapted to selectively lock said attachment tube to said coupling assembly. The second coupling assembly includes a locked position wherein said attachment tube is locked to said coupling assembly, a guiding position wherein said attachment tube is moveably coupled to said coupling assembly, and an open position wherein said attachment tube is removed from said coupling assembly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the device of Shapira with a second coupling assembly, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

Shapira discloses the claimed invention except for the angled attachment tube has an angle of between about 3° and about 30°. The tool has a height of about 1 to about 6 inches. The tool has a diameter of about 0.02 to about 0.5 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the angled attachment tube having an angle of between about 3° and about 30°; the tool having a height of about 1 to about 6 inches; and the tool having a diameter of about 0.02 to about 0.5 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shapira (US Pat. 5,913,859) in view of Tidwell et al. (US Pat. 5,989,257).

Shapira discloses the claimed invention except for the attachment tube defining a plurality of elongated detents along an outer surface and said coupling assembly includes at least one projection for mating with said elongated detents. The coupling assembly includes an aperture for receiving said attachment tube and at least one movable projection extending into said aperture, wherein said movable projection cooperates with said attachment tube to retain said attachment tube in the guiding position.

Tidwell et al. disclose a surgical cutting device (abstract), which comprises a tube defining a plurality of elongated detents along an outer surface and an assembly including at least one projection for mating with the elongated detents (column 3, lines

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6-58). This mechanism provides a redundant system to prevent a user from accidentally moving the components to a disengaged position (column 3, lines 48-51).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the attachment tube of Shapira with a plurality of elongated detents and the projections as taught by Tidwell, in order to provide a redundant system to prevent a user from accidentally moving the components to a disengaged position (column 3, lines 48-51).

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shapira (US Pat. 5,913,859) in view of Tidwell et al. (US Pat. 5,989,257) in view of Wright (US Pat. 5,340,129).

Shapira in view of Tidwell disclose the claimed invention except for the motor housing includes a tool chuck and said coupling assembly includes a work shaft, said work shaft removably coupled to said tool chuck. The tool chuck is moved to a locked position coupling the work shaft by rotational movement of said coupling assembly about a portion of said motor housing.

Wright discloses a cutting device that comprises a tool chuck and a shaft that is removably coupled to the tool chuck (column 5, lines 52-64). The tool chuck is moved to a locked position coupling the work shaft by rotational movement (column 5, lines 52-64)(Fig. 5B). This system can be used in tandem with a detent locking system (column 5, lines 52-64).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the device of Shapira in view of Tidwell with a tool chuck locking mechanism, since the tool chuck locking mechanism can be used in tandem with a ball and detent locking system (column 5, lines 52-64), such as that disclosed by Shapira in view pf Tidwell et al.

# Response to Arguments

Applicant's arguments with respect to claims 1-14 and 16-21 have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Cumberledge whose telephone number is (571) 272-2289. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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